

Table 1: RBR Class Changes
RTM Baseline Used: 4/18/97
CCR 97-0710/A

RBR_id	req_key	Rel	Req_Category	segment	req_type	s_verif_method	s_verif_stat	a_verif_method	a_verif_stat	CCR	text	interpretation text	clarification
SCF-0001#B	8643	<u>B1</u>	N/A_procedural	N/A_procedural	procedural	not verified by ECS	N/A_procedural	not verified by ECS	N/A_procedural	96-1474A	The SCF interface platform shall adhere to requirements specified in the Data Production Software and SCF Standards and Guidelines, GSFC 423-16-01. This standards document includes SCF requirements for operating system, computer communications, e-mail protocol, and windowing protocol.	External requirement: Information only. No action is required by ECS.	
SCF-0010#B	8646	<u>B0</u>	N/A_procedural	N/A_procedural	procedural	not verified by ECS	N/A_procedural	not verified by ECS	N/A_procedural	96-1474A	The SCF interface shall consist of an ESDIS approved computing platform that shall have a C compiler. To access FORTRAN routines in the ECS Toolkits, the platform shall also have a FORTRAN compiler.	External only requirement: Information only. No action is required by ECS.	
SCF-0020#B	9275	<u>B0</u>	N/A_procedural	N/A_procedural	procedural	not verified by ECS	N/A_procedural	not verified by ECS	N/A_procedural	97-0183A	The SCF interface platform shall supply the DCE client and have an I/O	External only requirement: Information only. No action is	DCE client is only required of SCFs that do not host

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											communication port and the ability to run TCP/IP software for communication to the ECS.	required by ECS. B: ASTER GDS interfaces to EDC DAAC only.	kerberos, per SCF-0025#B
SCF-0025#B	8653	<u>B0</u>	N/A_pro cedural	N/A_pro cedural	procedural	not verified by ECS	N/A_pro cedural	not verified by ECS	N/A_pro cedural	96-1474A	The SCF interface platform shall provide one of the following levels of security for interoperation with ECS: a. Kerberized authentication for bi-directional file transfers. b. User of Distributed Computing Environment (DCE) for authentication of users, authorization of users for access to services such as remote file access, and provision for integrity of data being transferred.	External only requirement: Information only. No action is required by ECS.	
SCF-0030#B	8659	<u>B0</u>	N/A_pro cedural	N/A_pro cedural	procedural	not verified by ECS	N/A_pro cedural	not verified by ECS	N/A_pro cedural	96-1474A	The SCF interface platform shall have adequate computing resources for the storage, compilation, linking, and execution of ECS supplied software resident on the platform.	External only requirement: Information only. No action is required by ECS.	

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SCF-0060#B	8660	<u>B0</u>	mission essential	SDPS	interface	demo	un-verified	demo	un-verified	96-1474A	The ECS shall have the capability to provide to the SCF the Toolkit Delivery and Update Package. This package includes the PGS toolkit which supplies tools for the emulation of the ECS production environment and contains a ECS-standardized software routines to aid in science data production software development.		
SCF-0070#B	9304	<u>B0</u>	mission essential	SDPS	interface	demo	un-verified	demo	un-verified	97-0183A	The ECS shall have the capability to provide Integration and Test Specifications to the scientist at the SCF. These specifications are defined by the Data Processing Focus Team. These specifications are implemented in the Data Production Software Delivery Package and support smooth integration of the data	These specifications are actually requirements for the science software packages that SCFs provide to DAACs and the Data Processing Focus Team is no longer in existence.	

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											production software into the ECS production environment.		
SCF-0080#B	9276	<u>B0</u>	mission essential	SDPS	interface	demo	un-verified	demo	un-verified	97-0183A	The ECS shall have the capability to provide an Interactive Session Dialog with the SCF. This dialog, to aid integration and test of the data production software into the ECS production environment, shall support, at a minimum, general communications between the ECS and the SCF that include logins, mail messages, status reports, test coordination, test execution scripts, and solutions to minor problems.	The specified messages, reports, coordination, and problem solutions are provided via e-mail. Security concerns preclude login by users except as provided for SCF-0085#B.	
SCF-0085#B	6525	<u>B0</u>	mission fulfillment	SDPS	interface	test	un-verified	test	un-verified	97-0322A	The ECS shall support remote science software integration and test activities at the DAACs including: a. executing code checkers, compiling, linking, debugging code, file comparison	Interface provides SCFs with access to existing DAAC operator GUIs without providing	

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											and science software resource profiling from the SCF; b. interactive remote access from the SCF to a job scheduling tool for defining and executing jobs.	new DAAC functionality.	
SCF-0090#B	8664	<u>B0</u>	mission essential	SDPS	interface	test	un-verified	test	un-verified	96-1474A	The SCF shall have the capability to provide ECS with the Data Production Software Delivery Package with "Required Items For Delivery" as specified by the Science User's Guide and Operations Procedure Handbook for the ECS Project.	This implies a requirement for ECS to receive Data Production Software Delivery Packages that SCFs send.	
SCF-0100#B	9322	<u>B0B1</u>	mission essential	SDPS	interface	test	un-verified	test	un-verified	97-0183A	The ECS shall have the capability to forward Test Products to the SCF. These products generated by the science software at the ECS will require the review of the scientist at the SCF who submitted the software.	"Test products" are the "results of science software testing" per a test plan provided to the DAAC by the SCF that developed the science software to be tested.	
SCF-0110#B	8674	<u>B0</u>	mission essential	SDPS	interface	demo	un-verified	demo	un-verified	96-1474A	The ECS shall have	"Test products	

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											the capability to receive Test Product Reviews from the SCF. These reviews shall include the comments and recommendations of the scientist at the SCF who has reviewed the Test Products.	Reviews" are SCFs' analyses of the results of science software testing per SCF-provided test plans (i.e., Test Products).	
SCF-0120#B	9326	<u>B0</u>	mission essential	SDPS	interface	test	un-verified	test	un-verified	97-0183A	The ECS shall have the capability to receive Data Production Software Updates from the SCF. These Data Production Software Updates include modifications to any data production software already submitted to the ECS by the SCF. The Data Production Software Updates may include some or all the items required in the Data Production Software Delivery Package.		<u>No change in Data Production software interface from B0 to B1</u>
SCF-0130#B	9305	<u>B0</u>	mission essential	SDPS	interface	test	un-verified	test	un-verified	97-0183A	The ECS shall have the capability to receive Special Products from the		<u>ECS receives L1-L4 Special products</u>

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											SCF. These shall include L1 - L4 Special Products.		<u>from SCF - no change from B0 to B1; other related Special Product requirements SCF-0130-0170#B, and -0190#B were all allocated to B0 by IV&V</u>
SCF-0140#B	9307	<u>B0</u>	mission essential	SDPS	interface	test	un-verified	test	un-verified	97-0183A	The ECS shall have the capability to receive Metadata, related to Special Products, from the SCF.		
SCF-0150#B	9310	<u>B0</u>	mission essential	SDPS	interface	test	un-verified	test	un-verified	97-0183A	The ECS shall have the capability to receive Ancillary Data, related to Special Products, from the SCF.		
SCF-0160#B	9311	<u>B0</u>	mission essential	SDPS	interface	test	un-verified	test	un-verified	97-0183A	The ECS shall have the capability to receive Calibration Data, related to Special Products, from the SCF.		

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SCF-0170#B	9313	<u>B0</u>	mission essential	SDPS	interface	test	un-verified	test	un-verified	97-0183A	The ECS shall have the capability to receive Correlative Data, related to Special Products, from the SCF.		
SCF-0180#B	9315	<u>B1</u>	mission essential	SDPS	interface	test	un-verified	test	un-verified	97-0183A	The ECS shall have the capability to receive Documents from the SCF that are related to Special Products and deemed necessary by the contributing scientist.		
SCF-0190#B	9316	<u>B0</u>	mission essential	SDPS	interface	test	un-verified	test	un-verified	97-0183A	The ECS shall have the capability to receive Data Production Software, related to Special Products, from the SCF.		
SCF-0200#B	8692	<u>B0</u>	mission essential	SDPS	interface	demo	un-verified	demo	un-verified	96-1474A	The ECS shall have the capability to receive from the SCF a QA Notification Specification. This specification, submitted by the scientist at the SCF, describes the conditions under which data should be		

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											forwarded to the SCF for QA.		
SCF-0210#B	8695	<u>B0</u>	mission essential	SDPS	interface	demo	un-verified	demo	un-verified	96-1474A	The ECS shall have the capability to send a Data Quality Request Notification to the SCF. This notification is sent when QA notification criteria are met during routine ECS processing. The notification states the data product and the time by which a notification, and optionally data, must be evaluated and returned to the ECS for inclusion as an update to the product metadata.	This notification is an action to be taken by ECS after the occurrence of a triggering event per a subscription that the SCF had previously entered. SCFs no longer have a time limit by which they must complete their QA of science data, but the metadata will reflect the lack or presence of the QA.	<u>QA Data notification</u> - always email
SCF-0220#B	8700	<u>B0B1</u>	mission essential	SDPS	interface	demo	un-verified	demo	un-verified	96-1474A	The ECS shall have the capability to receive from the SCF a Request for Data to QA. This request may be a standing request	This is a request for data distribution whether the request is made as part of a	

RBR_id	req_key	Rel	Req_Category	segment	req_type	s_verif_method	s_verif_stat	a_verif_method	a_verif_stat	CCR	text	interpretation text	clarification
											specified in the QA Notification Specification and may include the data product specified in the Data Quality Request Notification, or other data required by the scientist to QA the data product.	subscription or as a data order.	
SCF-0230#B	8702	<u>B0</u>	mission essential	SDPS	interface	demo	un-verified	demo	un-verified	96-1474A	The ECS shall have the capability to send Data Delivered for QA to the SCF. This data includes the data requested by the scientist needed for the QA of data products.	This is a distribution of data as requested by the SCF.	
SCF-0240#B	8706	<u>B1</u>	mission essential	SDPS	interface	test	un-verified	test	un-verified	96-1474A	The ECS shall have the capability to receive an On Time QA from the SCF. This shall consist of the science QA codes describing the results of product QA and any further instructions to the ECS. The ECS shall accept the On Time QA when it is received within the time-out period specified	On Time QA is reflected in ECS as Metadata Updates that are made to in response to data QA by the SCF. Also, no distinction is presently made between on-time QA and QA that is not on time.	<u>On Time QA = Metadata updates = B.1</u>

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											in the Data Quality Request Notification. ECS shall accept post-time-out QA updates as Metadata Updates as specified by Requirement SCF-0250.		
SCF-0250#B	8708	<u>B1</u>	mission essential	SDPS	interface	test	un-verified	test	un-verified	96-1474A	The ECS shall have the capability to receive Metadata Updates from the SCF. These shall include the science QA codes and optionally a report describing the results of product QA and any further instructions to the ECS. The ECS shall only accept Metadata Updates when they are received after the time allotment specified in the Data Quality Request Notification.	On Time QA is the same as Metadata Updates. Also, no distinction is presently made between on-time QA and QA that is not on-time. Metadata updates will be accepted whenever appropriate.	<u>Metadata updates = B.1</u>
SCF-0260#B	8709	<u>B0</u>	mission fulfillment	SDPS	interface	demo	un-verified	demo	un-verified	96-1474A	The ECS shall have the capability to make a Reprocessing Request Template available to the SCF. This template will be used		<u>Reprocessing Request template: in ICD and a GUI accessible via</u>

RBR_id	req_key	Rel	Req_Category	segment	req_type	s_verif_method	s_verif_stat	a_verif_method	a_verif_stat	CCR	text	interpretation text	clarification
											by the scientist at the SCF to prepare a Reprocessing Request.		<u>X11/Internet - no change for B.1</u>
SCF-0270#B	8710	<u>B0</u>	mission essential	SDPS	interface	test	un-verified	test	un-verified	96-1474A	The ECS shall have the capability to receive a Reprocessing Request from the SCF. This request, at a minimum, contains the following, a list of all the products to be generated, the version numbers of the science software and calibration coefficients, a list of all ancillary data, and data start and stop times.		<u>Reprocessing Request from SCF; always email</u>
SCF-0280#B	8711	<u>B0</u>	mission essential	SDPS	interface	test	un-verified	test	un-verified	96-1474A	The ECS shall have the capability to supply a Reprocessing Status to the SCF. This status that includes the reprocessing schedule informs the scientist at the SCF the status of his reprocessing request and provides notification upon completion of the reprocessing by the	Reprocessing status and processing status are identical. SCFs requests notification of completion by entering a subscription to insertion of the data product being processed.	<u>Local Data Access Delivery Package; no change</u>

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											ECS.		
SCF-0290#B	8712	<u>B0</u>	mission essential	SDPS	interface	test	un-verified	test	un-verified	96-1474A	The ECS shall have the capability to send the Local Data Access Services Delivery Package to the SCF. This package shall provide management of, search of, and access to local metadata.		<u>COTS for Local Data Access Deliv. Package - no change</u>
SCF-0300#B	9277	<u>B0</u>	N/A_procedural	N/A_procedural	procedural	not verified by ECS	N/A_procedural	not verified by ECS	N/A_procedural	97-0183A	The SCF shall have the capability to install and make operational in the SCF environment all COTS products that are required by Local Data Access Services.	This is an SCF requirement.	
SCF-0310#B	8714	<u>B0</u>	mission essential	SDPS	interface	demo	un-verified	demo	un-verified	96-1474A	The ECS shall have the capability to receive Calibration Coefficient Requests from the SCF. The current or past calibration coefficients used in processing of instrument data may be requested by the scientist from the ECS.		Calibration coefficients are interpreted as 1) calibration and other coefficients and 2) SCF-generated ancillary data needed by the DAAC processing of science

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													software. These coefficients are treated like data products. Other coefficients are part of the Data Production Software Packages.
SCF-0320#B	9278	<u>B0</u>	mission essential	SDPS	interface	demo	un-verified	demo	un-verified	97-0183A	The ECS shall be capable of sending to the SCF Calibration Coefficients. These shall include the calibration coefficients requested by the scientist at the SCF in the Calibration Coefficient Request.	1: Calibration data are accessed via kftp	Calibration coefficients are interpreted as 1) calibration and other coefficients and 2) SCF-generated ancillary data needed by the DAAC processing of science software. <u>Calibration coefficients to SCF from ECS - no change (related to</u>

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													<u>0310 and 0330)</u>
SCF-0330#B	9279	<u>B0</u>	mission essential	SDPS	interface	test	un-verified	test	un-verified	97-0183A	The ECS shall have the capability to receive a Calibration Coefficient Update Package from the SCF. This package shall include a calibration coefficient file and other documentation needed to implement the updated coefficients.		Calibration coefficients are interpreted as 1) calibration and other coefficients and 2) SCF-generated ancillary data needed by the DAAC processing of science software.
SCF-0340#B	9318	<u>B0B1</u>	mission essential	SDPS	interface	test	un-verified	test	un-verified	97-0183A	The SCF shall have the capability to send a Request for Processing Status to the ECS for the status of SCF-requested data processing.	ECS has an implied requirement to receive the status requests from SCFs. Reprocessing status and processing status are identical.	<u>Request for reprocessing status from SCF - WWW + client (new in B1)</u>
SCF-0350#B	8717	<u>B0</u>	mission essential	SDPS	interface	test	un-verified	test	un-verified	96-1474A	The ECS shall have the capability to provide SCF with the Processing Status of SCF-	Reprocessing status and processing status are identical.	

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											requested data processing.		
SCF-0360#B	9320	<u>B0</u>	mission essential	SDPS	interface	test	un-verified	test	un-verified	97-0183A	The SCF shall have the capability to send a Request for Resource Usage to the ECS for information about ECS resource usage during SCF-requested data processing.	ECS has an implied requirement to receive the status requests from SCFs.	
SCF-0370#B	8719	<u>B0</u>	mission essential	SDPS	interface	test	un-verified	test	un-verified	96-1474A	The ECS shall have the capability to provide SCF with information about ECS Resource Usage during SCF-requested data processing.		
SCF-0380#B	8720	<u>B0</u>	mission essential	SDPS	interface	demo	un-verified	demo	un-verified	96-1474A	The SCF shall have the capability to send a Request for Product History (including the algorithms used) to the ECS for the history of data products that the SCF specifies.	ECS has an implied requirement to receive the status requests from SCFs. Product history means production history.	
SCF-0390#B	8721	<u>B0</u>	mission essential	SDPS	interface	demo	un-verified	demo	un-verified	96-1474A	The ECS shall have the capability to provide SCF with the Product	Product history means production history.	

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											History of data products that the SCF specifies.		